

We claim:

1. A stent comprising a plurality of circumferential bands, circumferential bands which are adjacent one another connected one to the other, the circumferential bands including first circumferential bands characterized by a first number of alternating first peaks and first troughs joined by bent struts and second circumferential bands characterized by a second number of alternating second peaks and second troughs joined by bent struts, the second number different from the first number.
2. The stent of claim 1 wherein the first and second circumferential bands are each characterized by a longitudinal extent, the longitudinal extent of each first circumferential band exceeding the longitudinal extent of each second circumferential band.
3. The stent of claim 1 wherein each of the bent struts is characterized by a width, the width of the bent struts of the first bands exceeding the width of the bent struts of the second bands.
4. The stent of claim 1 wherein bent struts which are circumferentially adjacent one another are parallel to one another.
5. The stent of claim 4 wherein the bent struts in longitudinally adjacent first and second circumferential bands are non-parallel to one another.
6. The stent of claim 4 wherein the first and second circumferential bands are each characterized by a longitudinal extent, the longitudinal extent of each first circumferential band exceeding the longitudinal extent of the second circumferential bands.
7. The stent of claim 6 wherein first and second circumferential bands which are longitudinally adjacent one another are connected by a plurality of connectors.
8. The stent of claim 7 wherein the connectors are straight.
9. The stent of claim 7 wherein the connectors are non-parallel to the longitudinal axis of the stent.
10. The stent of claim 8 wherein the connectors extend from peaks of circumferential bands to troughs of adjacent circumferential bands.
11. The stent of claim 8 wherein first and second circumferential bands which are longitudinally adjacent one another are connected by a plurality of connectors, the connectors being shorter in length than the longitudinal extent of the second

circumferential bands.

12. The stent of claim 7 wherein circumferentially adjacent connectors are joined via a first pathway along a first circumferential band and a second pathway along a second circumferential band, the first pathway being of the same length as the second pathway.

5 13. The stent of claim 12 wherein each first pathway traverses a total of three peaks and troughs and each second pathway traverse a total of five peaks and troughs.

14. The stent of claim 1 wherein the first and second circumferential bands each define a pathway around the periphery of the stent, the first and second pathways being of the same length.

10 15. The stent of claim 1 wherein the first and second peaks and first and second troughs are oriented at an angle between 0° and 70° with respect to the longitudinal axis of the stent.

16. The stent of claim 1 wherein the first and second peaks and first and second troughs are oriented at an angle of at least 15 degrees with respect to the longitudinal axis
15 of the stent.

17. A stent comprising a sidewall, the sidewall having a plurality of openings therein, each opening bounded by at least a first stent member and a second stent member, the first stent member of a larger width than the second stent member, the first stent member comprising a plurality of bent first struts which extend non-parallel to the longitudinal
20 axis of the stent, the second stent member comprising a plurality of bent second struts which extend non-parallel to the longitudinal axis of the stent, the bent first struts defining finger like first projections which are non-parallel to the longitudinal axis of the stent and the bent second struts defining finger like second projections which are non-parallel to the longitudinal axis of the stent, the number of first projections exceeding the
25 number of second projections.

18. The stent of claim 17 wherein each opening is defined by first projections which are non-parallel to second projections.

19. The stent of claim 17 wherein the openings comprise first openings and second openings, each first opening defined by first projections which are parallel to second
30 projections.

20. The stent of claim 19 wherein each second opening is defined by first projections which are non-parallel to second projections.

21. A stent comprising a plurality of circumferential bands, circumferential bands which are adjacent one another connected one to the other, the circumferential bands including first circumferential bands characterized by a first number of alternating first peaks and first troughs and second circumferential bands characterized by a second number of alternating second peaks and second troughs, the second number different from the first number, wherein the first peaks and troughs are oriented non-parallel to the longitudinal axis of the stent and the second peaks and second troughs are oriented non-parallel to the longitudinal axis of the stent.
22. The stent of claim 21 wherein the first and second circumferential bands are each characterized by a longitudinal extent, the longitudinal extent of each first circumferential band exceeding the longitudinal extent of the second circumferential bands.
23. The stent of claim 21 wherein first peaks and first troughs which are circumferentially adjacent one another are connected by struts and second peaks and second troughs which are circumferentially adjacent one another are connected by struts, each of the struts characterized by a width, the width of the struts of the first bands exceeding the width of the struts of the second bands.
24. The stent of claim 23 wherein struts which are circumferentially adjacent one another are parallel to one another.
25. The stent of claim 23 wherein the first and second circumferential bands are each characterized by a longitudinal extent, the longitudinal extent of each first circumferential band exceeding the longitudinal extent of each second circumferential band.
26. The stent of claim 25 wherein first and second circumferential bands which are longitudinally adjacent one another are connected by a plurality of connectors.
27. The stent of claim 26 wherein the connectors are straight.
28. The stent of claim 27 wherein the connectors are non-parallel to the longitudinal axis of the stent.
29. The stent of claim 27 wherein the connectors extend from peaks of circumferential bands to troughs of adjacent circumferential bands.
30. The stent of claim 27 wherein first and second circumferential bands which are longitudinally adjacent one another are connected by a plurality of connectors, the

connectors being shorter in length than the longitudinal extent of the second circumferential bands.

31. The stent of claim 28 wherein circumferentially adjacent connectors are joined via a first pathway along a first circumferential band and a second pathway along a second circumferential band, the first pathway being of the same length as the second pathway.
32. The stent of claim 21 wherein the first and second circumferential bands each define a pathway around the periphery of the stent, the first and second pathways being of the same length.
33. The stent of claim 21 wherein the struts in first bands which are longitudinally adjacent one another are non-parallel to one another.
34. The stent of claim 33 wherein the struts in first bands which are longitudinally adjacent one another slant in opposing directions relative to the longitudinal axis of the stent.
35. The stent of claim 21 wherein the first and second peaks and first and second troughs are oriented at an angle of at least 15 degrees with respect to the longitudinal axis of the stent.
36. A stent comprising a sidewall, the sidewall having a plurality of openings therein, each opening bounded by at least a first stent member and a second stent member, the first stent member of a larger width than the second stent member, the first stent member comprising a plurality of bent first struts which extend non-parallel to the longitudinal axis of the stent, the second stent member comprising a plurality of bent second struts which extend non-parallel to the longitudinal axis of the stent, the bent first struts defining finger like first projections which are non-parallel to the longitudinal axis of the stent and the bent second struts defining finger like second projections which are non-parallel to the longitudinal axis of the stent, the number of first projections exceeding the number of second projections.
37. The stent of claim 36 wherein each opening is defined by first projections which are non-parallel to second projections.
38. The stent of claim 36 wherein the openings comprise first openings and second openings, each first opening defined by first projections which are parallel to second projections.

39. The stent of claim 38 wherein each second opening is defined by first projections which are non-parallel to second projections.

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